

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A flash memory cell comprising:
a substrate comprising a source and a drain;
a silicon dioxide layer comprising a silicon material and adjacent adjoining
said substrate;
a polysilicon floating gate;
a dielectric layer sandwiched between and adjoining both adjacent said
silicon dioxide layer and said floating gate, said dielectric layer comprising a
dielectric material having a dielectric constant greater than that of silicon dioxide;
~~a floating gate adjacent said dielectric layer;~~
an oxide-nitride-oxide (ONO) layer adjoining adjacent said floating gate; and
a control gate adjoining adjacent said ONO layer.

2-6. (Canceled).

7. (Original) The flash memory cell of Claim 1 wherein said dielectric material comprises a metal oxide.

8. (Original) The flash memory cell of Claim 1 wherein said dielectric layer comprises a composite of a metal oxide and a material selected from the group consisting of silicon dioxide, silicon oxynitride and silicon oxynitrate.

9. (Canceled).

10. (Currently Amended) A flash memory array comprising memory cells, wherein a memory cell comprises:

a substrate comprising a source and a drain;

a first layer comprising a silicon material;

a tunnel oxide layer sandwiched between and adjoining both adjacent said substrate and said first layer, said tunnel oxide layer comprising a dielectric material having a dielectric constant greater than that of silicon dioxide;

~~a layer comprising a silicon material and adjacent said tunnel oxide layer;~~

a polysilicon floating gate adjoining adjacent said first dielectric layer;

an oxide-nitride-oxide (ONO) layer adjoining adjacent said floating gate; and

a control gate adjoining adjacent said ONO layer.

11. (Canceled).

12. (Previously Presented) The flash memory array of Claim 10 wherein said silicon material is selected from the group consisting of silicon dioxide, silicon oxynitride and silicon oxynitrate.

13. (Previously Presented) The flash memory array of Claim 10 wherein said dielectric material comprises a metal oxide.

14-20. (Canceled).

21. (Currently Amended) A flash memory cell comprising:

a substrate comprising a source and a drain;

a first layer comprising a first silicon material and adjoining adjacent said

substrate;

a second layer comprising a second silicon material;

a dielectric layer sandwiched between and adjoining both adjacent said first silicon dioxide layer and said second layer, said dielectric layer comprising a dielectric material having a dielectric constant greater than that of silicon dioxide;

~~a second layer comprising a first silicon material and adjacent said dielectric layer;~~

a polysilicon floating gate adjoining adjacent said second layer silicon dioxide;

an oxide-nitride-oxide (ONO) layer adjoining adjacent said floating gate; and

a control gate adjoining adjacent said ONO layer.

22. (Original) The flash memory cell of Claim 21 wherein said first silicon material is selected from the group consisting of silicon dioxide, silicon oxynitride and silicon oxynitrate.

23. (Original) The flash memory cell of Claim 21 wherein said second silicon material is selected from the group consisting of silicon dioxide, silicon oxynitride and silicon oxynitrate.

24. (Original) The flash memory cell of Claim 21 wherein said dielectric material comprises a metal oxide.

25. (Original) The flash memory cell of Claim 21 wherein said dielectric layer comprises a composite of a metal oxide and a material selected from the group consisting of silicon dioxide, silicon oxynitride and silicon oxynitrate.